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ABSTRACT

In 1987-88, Gateway Technical College (GTC) in Racine, Wisconsin developed a model for identifying programs as potential candidates for either an in-depth evaluation or program audit. In order to facilitate program comparisons, the model applies the same evaluation criteria to all programs. The criteria, which were selected to match the concerns of the district while taking into consideration the availability and timeliness of data, include the following: (1) the number of full- and part-time students enrolled in the program; (2) the number of students registered in the program divided by established program capacity; (3) the number of program graduates; (4) the number of graduates reporting employment in their field of training; (5) the number of graduates employed in their field of study divided by the number in the labor market; (6) occupational outlook within the field; (7) full-time equivalent enrollments generated; and (8) the district's advantage in offering the program as opposed to other schools in the system. For each program offered at GTC, raw numbers are collected and statistically verified for each evaluation criterion, figures are normalized, the criteria are weighted by relative importance, weighted scores are totalled, and programs are ranked by total score. The programs' rank, as well as additional considerations, such as whether a program is new or continuing, identification by external agencies for evaluation, or the existence of district plans for program development, are then used to determine which programs could benefit from a comprehensive evaluation. Results of the 1987-88 application of the model at GTC are provided. (AAZC)

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Gateway

1987-88 Monitoring and Screening Study

RESEARCH, PLANNING and EVALUATION SERVICES

AUGUST 1988

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JC 880 520

GATEWAY TECHNICAL COLLEGE

1987-88 MONITORING AND SCREENING STUDY

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Research, Planning and Evaluation Services
July 1988

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THE MONITORING AND SCREENING STUDY

The purpose of Monitoring and Screening is to provide a systematic method for identifying programs which are potential candidates for either an In-Depth Program Evaluation or Program Audit. The evaluation model was designed so it could provide--for all programs--measurement by the same criteria and with criteria providing equal comparison across programs. An additional consideration was that the model and the indicators must not be too complex or cumbersome for implementation on an annual basis.

The model utilizes statistical data available from Student Services, Administrative Services, and Research, Planning and Evaluation Services, as well as occupational projections published by the Wisconsin Career Information Service. The measurements are focused on those issues of major concern to the District, eg. enrollment, graduation rates, placement, job outlook, etc.

Specific criteria used in the model as well as a description of the statistical model are covered in the following section: METHODOLOGY. The RESULTS section includes the statistical findings from the Monitoring and Screening model as well as a discussion of the analysis of these findings. Details related to the criterion used for the decision to recommend evaluation or audit is also included in this section. The final section: RECOMMENDATIONS provides a list of the programs recommended for an In-Depth Evaluation or Program Audit. Table VI in this section also provides details for all degree and diploma programs in reverse rank order.

METHODOLOGY

Major District concerns, availability and timeliness were prime considerations in the selection of the components (variables) used in the Monitoring and Screening model. The model components listed below were identified following a review of the available data and careful analysis of its accuracy and timeliness in providing the desired measure.

Monitoring and Screening Components

- HEADCOUNT ENROLLMENT

  Description: The number of full- and part-time students enrolled in the program.
  Source: WBVTAE Student Accounting System Report VE20442
  Time Period: 1986-87 School Year

- PROGRAM CAPACITY

  Description: The number of students registered in a program divided by the established capacity for that program.
  Source: Student Services, "Gateway Admissions for Fall 1987 and Spring 1988, Final Report"
  Time Period: Average of Fall of 1987 and Spring of 1988

- GRADUATES

  Description: Number of students graduating from a program.
  Source: Research, Planning and Evaluation Services (Data Processing Report Number SB7099 used as the survey population for the annual Graduate Follow-Up Study)
  Time Period: Total number for 1986-87

- PLACEMENT NUMBER

  Description: The total number of students reporting they have secured employment in a field directly related to their training.
  Source: Research, Planning and Evaluation Services. This figure is based on responses to the annual Graduate Follow-Up Study.
  Time Period: Respondents' reported employment status during the survey period, September-December, 1987

- PLACEMENT PERCENTAGE

  Description: The total number of students reporting they are employed-related divided by the total number of respondents reporting they are in the labor market.
  Source: Research, Planning and Evaluation Services. This figure is based on responses to the annual Graduate Follow-Up Study
  Time Period: Respondents' reported status during the survey period: September-December, 1987

- OCCUPATIONAL OUTLOOK

  Description: A rating based on information drawn from the Wisconsin Career Information System (WCIS) and other available information such as number of job orders. The rating is based on a five point scale where: 5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor.
  Source: Job Placement - Student Services
  Time Period: 1988-1992

- FTE GENERATION

  Description: The total number of Full Time Equivalent (FTE) enrollments generated. This figure combines full- and part-time enrollments and as the name implies, converts the figure to the equivalent in terms of full-time enrollment.

  This figure also provides an estimate of revenue generated by each program. FTE's are used as the unit of measure by the WBVTAE in distributing state aids - the state "share" of educational costs.
  Source: WBTVAE Student Accounting System Report VE20442
  Time Period: 1986-87 School year

- COMPARATIVE ADVANTAGE

  Description: The District's advantage in offering the program vis-a-vis the other schools in the Wisconsin VTAE system. Programs were scored on three criteria:

  1) Program unique to the state?
  2) Program offered by one or none of the three neighboring districts (BTI, WCTI, MATC)?
  3) Program offered by less than half of the 16 VTAE Districts?

  "Yes" responses to the criteria result in a score of one (1); "no" responses were assigned a zero. The maximum score is three (3).
  Source: WBVTAE, Program System (VE70115) Program List
  Time Period: Current year

The Monitoring and Screening Model

As described below, the model used for Monitoring and Screening involves a six step process:

1. Collect raw numbers for each component.
2. Calculate standard statistics to verify components.
3. Normalize components for relative comparison across programs.
4. Weigh components by relative importance.
5. Total the weighted component scores.
6. Rank order programs by the total score.

Statistics for each of the Monitoring and Screening components were collected and entered on **Lotus 1-2-3** spreadsheets.[1] The information collected for the study was also entered into a data file to facilitate analysis using the **Statistical Package for the Social Sciences** (SPSS).

The initial step taken was to analyze each component and calculate the mean (average), standard deviation (basically, the average deviation from the mean), and the range (minimum and maximum). These statistics are shown in Table I on page 7. The raw numbers collected for each program are provided in Table II on pages 7-8.

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[1] Whenever possible, historical spreadsheets back to FY 1978-79 have been developed to allow for trend analysis in other studies. Five programs were dropped from the Monitoring and Screening study due to insufficient data. The programs are: Child Care & Development, Computer Integrated Manufacturing, Small Business Operation, Hotel/Motel-General Sales, and Small Engine & Chassis Mechanic. These are all new programs or newly reactived programs.

TABLE I

1987-88 MONITORING AND SCREENING STUDY
SUMMARY STATISTICS OF MODEL COMPONENTS

Variable	Mean	Std Dev	Minimum	Maximum	Description
HCT	85.31	78.37	9	390	FULL & PART-TIME HEAD COUNT
CAPPCT	80.90	33.13	13	168	PERCENT OF PROGRAM CAPACITY
GRAD	16.44	20.84	0	140	NUMBER OF PROGRAM GRADUATES
EMPNUM	8.97	10.46	0	52	NUMBER EMPLOYED IN RELATED OCCUPATIONS
EMPPCT	65.50	24.10	0	100	PERCENT EMPLOYED IN RELATED OCCUPATIONS
OUTLOOK	3.95	.97	2	5	RATING OF JOB OUTLOOK: 1989-1993
FTEGEN	44.43	43.12	5	203	NUMBER OF FTE GENERATED
COMPADV	1.27	1.17	0	3	COMPETITIVE ADVANTAGE WITHIN VTAE SYSTEM

TABLE II
1987-88 MONITORING AND SCREENING STUDY
LIST OF COMPONENTS (RAW SCORES)

PROGRAM NUMBER AND TITLE		HCT	CAPPCT	GRAD	EMPNUM	EMPPCT	OUTLOOK	FTEGEN	COMPADV
100011	Horticulture - Production	44	165	6	4	80	5	25	3
100012	Horticulture - Marketing	32	75	8	6	86	5	22	3
101011	Accounting	390	116	61	33	62	4	203	0
101021	Aviation Mid-Management	20	37	4	1	33	2	17	3
101026	Banking & Financial Service	196	98	0	0	0	4	22	2
101043	Marketing	239	58	33	17	65	5	133	0
101044	Marketing - Fashion Merchandising	64	83	6	4	80	5	43	0
101046	Marketing - Industrial	41	26	9	5	63	5	23	2
101061	Court and Conference Reporting	121	63	9	8	100	5	80	2
101062	Admin. Asst. - Secretarial	192	61	30	23	89	5	124	0
101067	Admin. Asst. - Info Processing	161	114	22	15	71	5	87	2
101071	Data Processing	212	33	22	19	91	3	115	0
101091	Hotel/Motel Management	51	54	6	4	80	3	31	2
101942	Marketing - Materials Management	35	49	8	7	88	3	15	2
101961	Supervisor's Management	90	100	3	3	100	3	21	0
103041	Interior Design	67	153	7	5	83	4	38	2
104021	Aeronautics - Pilot Training	74	96	12	2	50	2	52	3
105031	Fire Science Technician	52	32	8	4	57	4	23	0
105041	Police Science	183	54	16	5	39	4	114	0
105101	Nursing - Technical	300	93	55	48	100	5	171	1
105181	Food Service Management	56	140	3	1	100	5	36	2
105203	Human Services Associate	155	96	14	7	58	3	90	2
106021	Automotive Technician	94	62	6	5	83	4	57	2
106051	Electronic Technician	114	59	28	16	67	3	59	0
106053	Electronic Computer Technician	213	39	46	28	76	3	123	2
106061	Mechanical Design Technician	63	92	10	7	70	5	34	0
106075	Structural Technician (Civil)	26	50	2	1	50	4	14	2
106077	Land Survey Technician	18	67	0	0	0	4	8	2
106121	Fluid Power Technician	37	168	7	5	83	4	22	2
106201	Electromechanical Technology	168	57	23	15	75	4	104	0
106231	Industrial Engineering Tech.	27	13	6	2	50	4	10	0
107012	Radio Broadcasting Technician	56	77	9	2	50	2	46	3

TABLE II - CONTINUED
1987-88 MONITORING AND SCREENING STUDY
LIST OF COMPONENTS (RAW SCORES)

PROGRAM NUMBER AND TITLE		HCT	CAPPCT	GRAD	EMPNUM	EMPPCT	OUTLOOK	FTEGEN	COMPADV
300901	Farm Training	97	81	3	3	100	2	7	1
301092	Travel Agent	108	97	40	12	38	3	36	2
304191	Fluid Power Maintenance	11	65	6	4	67	3	6	3
304422	Welding/Maint. & Fabrication	49	61	7	3	75	4	19	3
304441	Numerical Control Machine Operator	19	54	9	5	63	4	7	3
304661	Motorcycle Servicing	9	56	4	2	67	4	5	3
305101	Nursing Assistant	199	80	140	52	67	5	27	0
305102	Health Unit Clerk	40	100	15	10	83	3	18	0
305421	Homemaker/Home Health Aide	26	43	19	10	77	5	9	0
310912	Farrier	12	71	3	0	0	3	8	3
311011	Account Clerk	112	107	21	12	67	4	59	0
311035	Word Processing Specialist	27	125	7	2	40	5	15	0
311061	Clerk Typist	114	100	25	8	53	5	55	0
311071	Data Processing Machine Operator	37	100	19	6	46	5	17	2
313032	Food Service Assistant	24	50	2	1	100	5	13	2
314041	Auto Body	38	72	15	7	64	4	30	0
314043	Automotive Servicing	67	62	17	8	57	3	44	0
314141	Electronic Servicing	36	72	13	2	29	2	20	1
314201	Machine Tool Operation	20	100	4	3	75	4	15	0
314211	Drafting - Mechanical	57	77	20	11	65	5	31	1
314401	Upholstery	25	100	4	1	25	3	14	2
314622	Industrial Mechanic	17	131	5	3	60	5	15	2
315021	Cosmetology	57	88	14	11	85	5	36	1
315081	Dental Assistant	40	97	20	13	72	5	28	0
315091	Medical Assistant	81	93	28	23	85	4	39	0
315121	Surgical Tech.	39	110	9	4	50	4	18	0
324021	Airframe & Powerplant Mechanic	81	104	22	11	79	3	71	2

Number of programs = 59

The major components of the model were then "normalized" to provide measurements that would--when summarized into a total component score--allow equal comparison across all programs. This involved calculating Z scores for each component. The Z score transformation can be stated as follows:

$$Z = \frac{x - \bar{x}}{s}$$

where: x is the individual component score,
$\bar{x}$ is the mean value for that component, and
s is the standard deviation for that component.[2]

Programs with components which are favorable relative to other programs (eg. high enrollment) will have positive Z scores. Programs with relatively unfavorable components will have negative Z scores.

After a Z score was calculated for each component, that score was multiplied by a predetermined weight. The weights were assigned based on the relative importance of each component:

Component	Weight
HCT	16
CAPPCT	9
GRAD	13
EMPNUM	11
EMPPCT	16
OUTLOOK	16
FTEGEN	13
COMPADV	6

The weighted Z scores were then added together to arrive at a total component score for each program. Finally, the Total Score was used for a relative comparison across all programs by establishing a rank order. Table III provides a rank ordered summary by program including the individual Z scores and the Total Score.

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[2] Note that for each component, the mean will be zero and the standard deviation will always equal 1. Component Z scores fall above and below the mean in a relative order.

TABLE III

1987-88 MONITORING AND SCREENING STUDY

RESULTS OF ANALYSIS: TOTAL COMPONENT SCORE AND ALL COMPONENT Z SCORES

Programs Listed in Reverse Rank Order

RANK	PROGRAM NUMBER AND TITLE	TOTSCORE	ZHCT	ZCAPPCT	ZGRAD	ZEMPNUM	ZEMPPCT	ZOUTLOOK	ZFTEGEN	ZCOMPADV
1	310912 Farrier	-96.63	-.93537	-.28683	-.64504	-.85677	-2.71833	-.97605	-.84721	1.47516
2	101021 Aviation Mid-Management	-94.50	-.83329	-1.33435	-.59705	-.76121	-1.33631	-2.00439	-.64775	1.47516
3	314141 Electronic Servicing	-87.31	-.62913	-.27174	-.16512	-.66566	-1.53137	-2.00439	-.56658	-.23140
4	106077 Land Surveying Technician	-87.28	-.85881	-.42872	-.78901	-.85677	-2.71833	.05229	-.85185	.62188
5	314401 Upholstery	-71.12	-.76949	.57653	-.59705	-.76121	-1.68078	-.97605	-.69878	.62188
6	106231 Industrial Engineering Technician	-70.54	-.74397	-2.04074	-.50106	-.66566	-.64322	.05229	-.80547	-1.08468
7	106075 Structural Technician-Civil	-52.72	-.75673	-.93285	-.69303	-.76121	-.64322	.05229	-.70110	.62188
8	107012 Radio Broadcasting Technician	-52.17	-.37393	-.11476	-.35709	-.66566	-.64322	-2.00439	.02484	1.47516
9	304191 Fluid Power Maintenance	-48.93	-.94813	-.48004	-.50106	-.47454	.04987	-.97605	-.90288	1.47516
10	105031 Fire Science	-48.40	-.42497	-1.47623	-.40508	-.47454	-.34855	.05229	-.50628	-1.08468
11	104021 Aeronautics-Pilot Training	-39.52	-.14425	.44975	-.21311	-.66566	-.64322	-2.00439	.18024	1.47516
12	304661 Motorcycle Servicing	-38.84	-.97365	-.74267	-.59705	-.66566	.04987	.05229	-.92143	1.47516
13	101026 Banking & Financial Services	-38.12	1.41246	.51616	-.78901	-.85677	-2.71833	.05229	-.52019	.62188
14	314043 Automotive Servicing	-37.45	-.23357	-.57664	.02684	-.09232	-.34855	-.97605	-.01226	-1.08468
15	315121 Surgical Technician	-35.49	-.59085	.87841	-.35709	-.47454	-.64322	.05229	-.62456	-1.08468
16	300901 Farm Training	-34.25	.14923	-.00307	-.64504	-.57010	1.43190	-2.00439	-.87736	-.23140
17	304441 Numerical Control Machine Operator	-33.10	-.84605	-.80606	-.35709	-.37899	-.12444	.05229	-.86113	1.47516
18	101942 Marketing-Materials Management	-32.68	-.64189	-.97512	-.40508	-.18787	.91312	-.97605	-.69414	.62188
19	101091 Hotel/Motel Management	-32.36	-.43773	-.80305	-.50106	-.47454	.60185	-.97605	-.31841	.62188
20	314201 Machine Tool Operation	-30.56	-.83329	.57653	-.59705	-.57010	.39434	.05229	-.69414	-1.08468

TABLE III - CONTINUED
1987-88 MONITORING AND SCREENING STUDY
RESULTS OF ANALYSIS: TOTAL COMPONENT SCORE AND ALL COMPONENT Z SCORES
Programs Listed in Reverse Rank Order

RANK	PROGRAM NUMBER AND TITLE	TOTSCORE	ZHCT	ZCAPPCT	ZGRAD	ZEMPNUM	ZEMPPCT	ZOUTLOOK	ZFTEGEN	ZCOMPADV
21	311035 Word Processing Specialist	-28.07	-.74397	1.33123	-.45307	-.66566	-1.05824	1.08063	-.67558	-1.08468
22	314041 Auto Body	-26.30	-.60361	-.26268	-.06914	-.18787	-.07878	.05229	-.33697	-1.08468
23	305102 Health Unit Clerk	-22.15	-.57809	.57653	-.06914	.[illegible]880	.73881	-.97605	-.61296	-1.08468
24	101046 Marketing - Industrial	-20.31	-.56533	-1.66641	-.35709	-.37899	-.12444	1.08063	-.49932	.62188
25	304422 Welding/Maintenance & Fabrication	-16.48	-.46325	-.58871	-.45307	-.57010	.39434	.05229	-.58513	1.47516
26	101961 Supervisor's Management	-14.70	.05991	.57653	-.64504	-.57010	1.43190	-.97605	-.53643	-1.08468
27	305421 Homemaker/Home Health Aide	-12.19	-.75673	-1.15926	.12283	.09880	.47320	1.08063	-.82170	-1.08468
28	311071 Data Processing Machine Operation	-6.20	-.61637	.57653	.12283	-.28343	-.80093	1.08063	-.63152	.62188
29	301092 Travel Agent	-6.07	.28958	.48899	1.13065	.28991	-1.16200	-.97605	-.19317	.62188
30	314622 Industrial Mechanic	-5.28	-.87157	1.52141	-.54906	-.57010	-.22819	1.08063	-.69182	.62188
31	313032 Food Service Assistant	-3.78	-.78225	-.93285	-.69303	-.76121	1.43190	1.08063	-.72429	.62188
32	106051 Electronic Technician	-2.27	.36614	-.65814	.55475	.67214	.04987	-.97605	.34723	-1.08468
33	106061 Mechanical Design Technician	2.92	-.28461	.32598	-.30910	-.18787	.18683	1.08063	-.24188	-1.08468
34	101044 Marketing-Fashion Merchandising	4.47	-.27185	.06032	-.50106	-.47454	.60185	1.08063	-.03082	-1.08468
35	105041 Police Science	5.54	1.24658	-.81210	-.02115	-.37899	-1.12049	.05229	1.61124	-1.08468
36	106021 Automotive Technician	6.26	.11095	-.57060	-.50106	-.37899	.73881	.05229	.30084	.62188
37	314211 Drafting - Mechanical	8.91	-.36117	-.12080	.17082	.19435	-.03313	1.08063	-.30450	-.23140
38	105203 Human Services Associate	11.79	.88930	.45578	-.11713	-.18787	-.29875	-.97605	1.05461	.62188
39	100012 Horticulture - Marketing	11.83	-.68017	-.17816	-.40508	-.28343	.83842	1.08063	-.52715	1.47516

TABLE III - CONTINUED
1987-88 MONITORING AND SCREENING STUDY
RESULTS OF ANALYSIS; TOTAL COMPONENT SCORE AND ALL COMPONENT Z SCORES
Programs Listed in Reverse Rank Order

RANK	PROGRAM NUMBER AND TITLE	TOTSCORE	ZHCT	ZCAPPCT	ZGRAD	ZEMPNUM	ZEMPPCT	ZOUTLOOK	ZFTEGEN	ZCOMPADV
40	315081 Dental Assistant	12.04	-.57809	.49201	.17082	.38547	.27814	1.08063	-.37176	-1.084668
41	106121 Fluid Power Technician	13.30	-.61637	2.63534	-.45307	-.37899	.73881	.05229	-.52947	.62188
42	324021 Airframe & Powerplant Mechanics	15.71	-.05493	.69729	.26680	.19435	.54375	-.97605	.60699	.62188
43	311011 Account Clerk	18.04	.34062	.78181	.21881	.28991	.04987	.05229	.33795	-1.08468
44	103041 Interior Design	20.23	-.23357	2.18554	-.45307	-.37899	.73881	.05229	-.15606	.62188
45	311061 Clerk Typist	21.36	.36614	.57653	.41077	-.09232	-.50626	1.08063	.25445	-1.08468
46	315021 Cosmetology	22.64	-.36117	.19919	-.11713	.19435	.79277	1.08063	-.19781	-.23140
47	315091 Medical Assistant	30.07	-.05493	.35013	.55475	1.34103	.81767	.05229	-.12127	-1.08468
48	100011 Horticulture - Production	32.72	-.52705	2.53874	-.50106	-.47454	.60185	1.08063	-.44134	1.47516
49	105181 Food Service Management	34.77	-.37393	1.78404	-.64504	-.76121	1.43190	1.08063	-.19085	.62188
50	106201 Electromechanical Technology	39.46	1.05518	-.73059	.31479	.57658	.39434	.05229	1.39091	-1.08468
51	101071 Data Processing	42.42	1.61661	-1.45208	.26680	.95881	1.03763	-.97605	1.62516	-1.08468
52	101061 Court & Conference Reporting	51.23	.45546	-.55551	-.35709	-.09232	1.43190	1.08063	.82036	.62188
53	106053 Electronic Computer Technician	71.69	1.62937	-1.27699	1.41860	1.81882	.42339	-.97605	1.82926	.62188
54	101067 Admin. Asst. - Info Processing	72.03	.96586	.99916	.26680	.57658	.24493	1.08063	.98735	.62188
55	101043 Marketing	81.13	1.96113	-.70644	.79471	.76769	-.00408	1.08063	2.04727	-1.08468
56	101062 Admin. Asst. - Secretarial	89.57	1.36142	-.59475	.65073	1.34103	.95462	1.08063	1.83622	-1.08468
57	305101 Nursing Assistant	151.73	1.45074	-.02722	5.92980	4.11218	.04987	1.08063	-.39495	-1.08468
58	101011 Accounting	164.87	3.88788	1.06558	2.13847	2.29660	-.13274	.05299	3.67774	-1.08468
59	105101 Nursing - Technical	189.04	2.73949	.35013	1.85052	3.72995	1.43190	1.08063	2.93556	-.23140

Number of programs = 59

Analysis of Monitoring and Screening Results

The results produced by the Monitoring and Screening Model provide a quantitative method for examining programs in a ranked order. One test of the model's success in achieving its stated goals is to examine the findings against qualitative or intuitive judgments; the findings should provide few surprises to those familiar with the relative strengths and weaknesses of District programs. Although the model is not without its deficiencies (most notably the time lag in some of the components), it does appear to pass this intuitive test.[3]

The findings of the study are utilized as a preliminary basis for identifying programs which may benefit from the comprehensive examination provided by an In-Depth Program Evaluation. However, in order to translate the results into recommendations for policy decisions it is necessary to consider the findings within the context of other more qualitative factors. The primary decision factors considered in identifying candidates for 1988-89 evaluation were:

1. The program's present status, eg:
   a. New program
   b. Continuing program
   c. Not currently operating in program mode (course offerings only)
   d. Targeted for suspension or discontinuance

2. Programs identified by external agencies for evaluation or accreditation review.

3. District plans for program development and modification

4. Program's position in the Five Year Program Planning Cycle

   a. Year 1: Evaluation/Audit Conducted
   b. Year 2: Program Modification
   c. Years 3-5: Implementation and Assessment

Table IV provides guidelines for identifying a program's 1988-89 position in the Program Planning Cycle based on the date of the last evaluation/audit.

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[3] As indicated in the component descriptions earlier in this report, the time period in many cases is the prior fiscal year. Compounding this problem is the fact that there may be a year or more lag between the time modifications are made to a program and the point at which the impact of the modifications are captured by the statistics.

TABLE IV

FIVE YEAR PROGRAM PLANNING CYCLE
1988-89 Position Based on Date of Last Program Review

Date of Last Review	Evaluation Conducted Year 1	Program Modified Year 2	Implementation and Assessment Year 3	Year 4	Year 5
1983-84	X				
1984-85					X
1985-86				X	
1986-87			X		
1987-88		X			

The rank order produced by the Monitoring and Screening model creates a general context in which the decision criteria can be addressed. Using the reverse order ranking, programs are considered one by one for a decision to schedule In-Depth Evaluation or Audit. The decision factors listed above, specific decision criteria and associated action are shown in hierarchical order in Table V on the next page.

TABLE V

HIERARCHY OF DECISION CRITERIA AND ASSOCIATED ACTION

DECISION FACTOR	CRITERION	ACTION
1. Program Status	a. First graduating class from new program	Schedule evaluation (required by WBVTAE)
	b. Continuing program	Check last evaluation date and decision factors 2-4. Request evaluation update from coordinators and schedule evaluation as needed.
	c. Not currently operating in program mode	Suggest District Board consider suspension or discontinuance.
	d. Targeted for suspension or discontinuance	Postpone evaluation decision based on outcome of District Board action.
2. External Request for Program Evaluation	From Accrediting Agency or State Board	Schedule evaluation for 1988-89.
3. District Plans for Program Modification	Program Modification scheduled for 1988-89.	Check last evaluation date and decision factors 3-4. Request update on evaluation recommendations and schedule evaluation or audit for 1988-89 if needed.
	Program Modification scheduled for 1989-90.	Check last evaluation date and decision factors 3-4. Request evaluation update and schedule program evaluation or audit for 1988-89 if needed.
4. Program position in Program Planning Cycle	Check last evaluation/audit date: (see Table IV)	
	Conducted in: Year 1	Coordinator preparing action plan. Provide assistance as needed.
	Year 3-4	Request evaluation update and program status recommendation from coordinator.
	Year 5	Schedule Evaluation or Audit for 1988-89.

RECOMMENDATIONS

As indicated in the preceding discussion, identification of programs for a decision to proceed with evaluation/audit is not a simple process which can be dominated by a mathematical model. The process can, however, be done in a systematic way using the Monitoring and Screening results as a guideline and utilizing specific decision criteria.

The programs recommended for evaluation or audit during 1988-89 are:

In-Depth Program Evaluation

10-109-1 Hotel/Motel Management
30-419-1 Fluid Power Maintenance
31-404-3 Auto Servicing
31-420-1 Machine Tool Operation
31-440-1 Upholstery

Program Audit

10-104-3 Marketing
10-196-1 Supervisor's Management
10-606-1 Mechanical Design Technician
30-466-1 Motorcycle Servicing
31-101-1 Account Clerk
31-106-1 Clerk Typist
31-107-1 Data Processing Machine Operator
31-404-1 Auto Body

Other In-Depth Program Evaluation

Apprentice Programs

All associate degree and diploma programs are listed in Table VI. The programs are listed in reverse order according to 1988 Monitoring and Screening rank. The table includes the year of the last program evaluation/audit, date the program was approved and the program's 1988-89 position in the program planning cycle including recommendation for evaluation/audit in 1988-89. Comments included in Table VI provide information relating to the recommendations for evaluation/audit.

TABLE VI
1987-88 MONITORING AND SCREENING STUDY
PROGRAM PRIORITY FOR EVALUATION
(Sorted in reverse order)

PRG CODE	PROGRAM TITLE	Monitoring & Screening (Rank) 1988	1987	1986	Date Approved	Date of Last Review	Date of NEXT Review	Evaluation or Audit	Program Modified	--Assessment-- Yr3	Yr4	Yr5	** COMMENTS **
31-091-2	FARRIER	1	25	4	12/75	84-85	89-90					X	
10-102-1	AVIATION MID-MANAGEMENT	2	10	14	01/68	85-86	90-91				X		
31-414-1	ELECTRONIC SERVICING	3	14	11	07/68	85-86	90-91				X		
10-607-7	LAND SURVEYING TECHNICIAN	4	2	3	12/72	82-83	89-90						
31-440-1	UPHOLSTERY	5	16	5	09/68	83-84	88-89	X					1988-89 In-Depth Evaluation Required
10-623-1	INDUSTRIAL ENGINEERING TECHNICIAN	6	3	16	01/68	84-85	89-90					X	
10-607-5	STRUCTURAL TECHNICIAN - CIVIL	7	6	26	01/68	84-85	89-90					X	Suspended
10-701-2	RADIO BROADCASTING TECHNICIAN	8	20	18	12/75	86-87	91-92			X			Progress Report Completed
30-419-1	FLUID POWER MAINTENANCE	9	4	31	01/68	83-84	88-89	X					1988-89 In-Depth Evaluation Required
10-503-1	FIRE SCIENCE	10	7	19	03/80	87-88	92-93		X				Action Plan for Modification in Progress
10-402-1	AERONAUTICS - PILOT TRAINING	11	28	12	01/68	86-87	91-92			X			Progress Report Completed
30-466-1	MOTORCYCLE SERVICING	12	17	27	05/77	NONE	88-89	X					1988-89 Program Audit
10-102-6	BANKING & FINANCIAL SERVICES	13	18	41	09/83	NEW	89-90						5 Year New Program
31-404-3	AUTOMOTIVE SERVICING	14	33	22	01/68	83-84	88-89	X					1988-89 In-Depth Evaluation Required
31-512-1	SURGICAL TECHNICIAN	15	13	20	05/70	84-85	89-90					X	
30-090-1	FARM TRAINING	16	23	2	07/71	84-85	89-90					X	
30-444-1	NUMERICAL CONTROL MACHINE OPERATOR	17	1	**	03/85	87-88	92-93		X				Action Plan for Modification in Progress
10-194-2	MARKETING - MATERIALS MANAGEMENT	18	11	10	05/77	87-88	92-93		X				Action Plan for Modification in Progress
10-109-1	HOTEL/MOTEL MANAGEMENT	19	22	38	05/73	83-84	88-89	X					1988-89 In-Depth Evaluation Required
31-420-1	MACHINE TOOL OPERATION	20	12	9	01/68	83-84	88-89	X					1988-89 In-Depth Evaluation Required
31-103-5	WORD PROCESSING SPECIALIST	21	24	47	07/83	84-85	89-90					X	1988-89 Program Audit
31-404-1	AUTO BODY	22	37	23	06/67	83-84	88-89	X					1988-89 Program Audit
30-510-2	HEALTH UNIT CLERK	23	15	13	05/72	85-86	90-91				X		
10-104-6	MARKETING-INDUSTRIAL	24	26	32	01/68	86-87	91-92			X			Progress Report Completed
30-442-2	WELDING/MAINTENANCE & FABRICATION	25	27	15	01/68	84-85	89-90					X	
10-196-1	SUPERVISORY MANAGEMENT	26	5	6	12/75	83-84	88-89	X					1988-89 Program Audit
30-542-1	HOMEMAKER/HOME HEALTH AIDE	27	**	**	03/86	87-88	SUSPEND		X				Action Plan for Mod. in Progress/Suspended
31-107-1	DATA PROCESSING MACHINE OPERATION	28	43	29	01/68	83-84	88-89	X					1988-89 Program Audit
30-109-2	TRAVEL AGENT	29	31	24	05/78	85-86	90-91				X		
31-462-2	INDUSTRIAL MECHANIC	30	32	**	05/85	87-88	92-93		X				Action Plan for Modification in Progress
31-303-2	FOOD SERVICE ASSISTANT	31	30	25	12/68	85-86	90-91				X		
10-605-1	ELECTRONIC TECHNICIAN	32	41	30	01/68	84-85	89-90					X	
10-606-1	MECHANICAL DESIGN TECHNICIAN	33	29	34	01/68	83-84	88-89	X					1988-89 Program Audit
10-104-4	MARKETING-FASHION MERCHANDISING	34	21	44	01/68	86-87	91-92			X			Progress Report Completed
10-504-1	POLICE SCIENCE	35	50	50	01/68	86-87	91-92			X			Progress Reported Completed

TABLE VI
1987-88 MONITORING AND SCREENING STUDY
PROGRAM PRIORITY FOR EVALUATION
(Sorted in reverse order)

PRG CODE	PROGRAM TITLE	Monitoring & Screening (Rank) 1988	1987	1986	Date Approved	Date of Last Review	Date of NEXT Review	Evaluation or Audit	Program Modified	--Assessment-- Yr3	Yr4	Yr5	** COMMENTS **
10-602-1	AUTOMOTIVE TECHNICIAN	36	38	35	01/68	84-85	89-90					X	
31-421-1	DRAFTING - MECHANICAL	37	19	17	07/68	86-87	91-92			X			Progress Report Completed
10-520-3	HUMAN SERVICES ASSOCIATE	38	35	28	05/79	86-87	91-92			X			Progress Report Completed
10-001-2	HORTICULTURE - MARKETING	39	40	36	03/80	87-88	92-93		X				Action Plan for Modification in Progress
31-508-1	DENTAL ASSISTANT	40	46	48	01/68	85-86	90-91				X		
10-612-1	FLUID POWER TECHNICIAN	41	9	7	11/79	86-87	91-92			X			Progress Report Completed
32-402-1	AIRFRAME & POWERPLANT MECHANICS	42	49	40	07/68	87-88	92-93		X				Action Plan for Modification in Progress
31-101-1	ACCOUNT CLERK	43	34	33	05/71	83-84	88-89	X					1988-89 Program Audit
10-304-1	INTERIOR DESIGN	44	45	37	01/68	86-87	91-92			X			Progress Report Completed
31-106-1	CLERK TYPIST	45	39	45	01/68	83-84	88-89	X					1988-89 Program Audit
31-502-1	COSMETOLOGY	46	44	43	12/72	84-85	89-90					X	
31-509-1	MEDICAL ASSISTANT	47	42	46	01/68	87-88	TBA		X				Accreditation Process in Progress
10-001-1	HORTICULTURE - PRODUCTION	48	36	39	01/68	87-88	92-93		X				Action Plan for Modification in Progress
10-518-1	FOOD SERVICE MANAGEMENT	49	47	42	06/80	86-87	91-92			X			Progress Report Completed
10-620-1	ELECTROMECHANICAL TECHNOLOGY	50	48	49	07/83	85-86	90-91				X		
10-107-1	DATA PROCESSING	51	52	53	01/68	84-85	89-90					X	
10-106-1	COURT & CONFERENCE REPORTING	52	51	51	01/68	86-87	91-92			X			Progress Report Completed
10-605-3	ELECTRONIC COMPUTER TECHNICAN	53	54	56	01/68	83-84	89-90						Evaluate with Electronic Technician/1989-90
10-106-7	ADMIN ASST - INFORMATION PROCESS	54	55	55	05/83	85-86	90-91				X		
10-104-3	MARKETING	55	56	52	01/68	83-84	88-89	X					1988-89 Program Audit
10-106-2	ADMIN ASST - SECRETARIAL	56	53	54	02/67	84-85	89-90					X	
30-510-1	NURSING ASSISTANT	57	58	58	05/71	84-85	89-90					X	
10-101-1	ACCOUNTING	58	57	57	01/68	85-86	90-91				X		
10-510-1	NURSING - TECHNICAL	59	59	59	11/71	87-88	95-96		X				Eight Year Accreditation Received
10-623-2	QUALITY ASSURANCE TECHNICIAN	**	8	21	05/81	84-85	HOLD					X	Suspended
10-104-9	MARKETING-TRANSPORT & DISTRIBUTION	**	**	8	05/77	84-85	SUSPEND					X	Suspended
10-307-1	CHILD CARE & DEVELOPMENT	**			05/87	NEW	90-91						1990-91 In-Depth Evaluation Required
10-455-3	CONSTRUCTION SUPERVISOR MANAGEMENT	**	**	**	05/81	NONE	SUSPEND						Suspended
10-628-2	COMPUTER INTEGRATED MANUFACTURING	**			09/87	NEW	90-91						1990-91 In-Depth Evaluation Required
31-080-4	FARM OPERATIONS	**	**	1	10/80	82-83	SUSPEND						Suspended
31-104-1	SMALL BUSINESS OPERATION	**	**	**	07/68	REINSTATED	90-91						Reinstated/Evaluate in 1990-91
31-104-5	GENERAL SALES-HOTEL/MOTEL	**	**	**	12/68	REINSTATED	90-91						Reinstated/Evaluate in 1990-91
31-461-1	SMALL ENGINE AND CHASSIS MECHANIC	**	**	**	10/74	REINSTATED	90-91						Reinstated/Evaluate in 1990-91

** Insufficient Data for Ranking

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